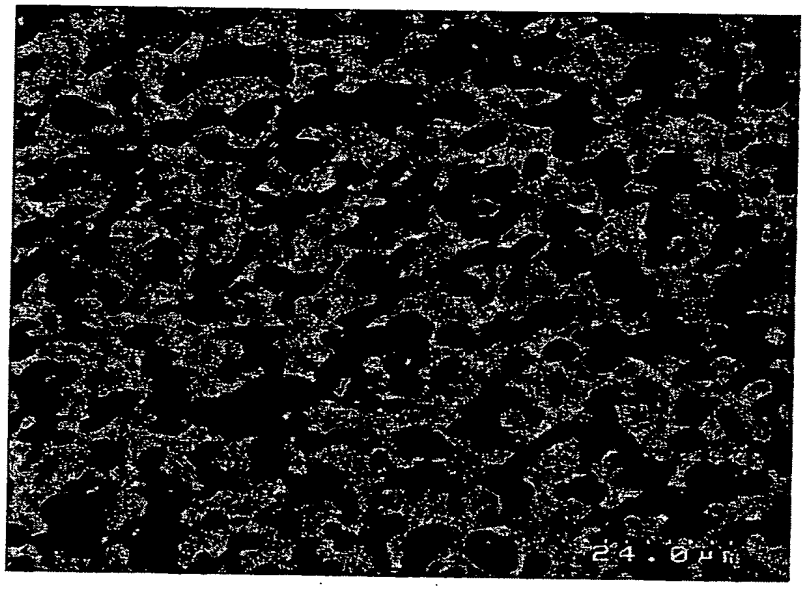


Fig. 1: SEM micrograph of the α-Ti(Al,O)/Al_2O_3 composite produced by sintering the Al/TiO_2 composite powder at 1550°C for 1 hour. The dark particles are Al_2O_3.

FIGURE 1

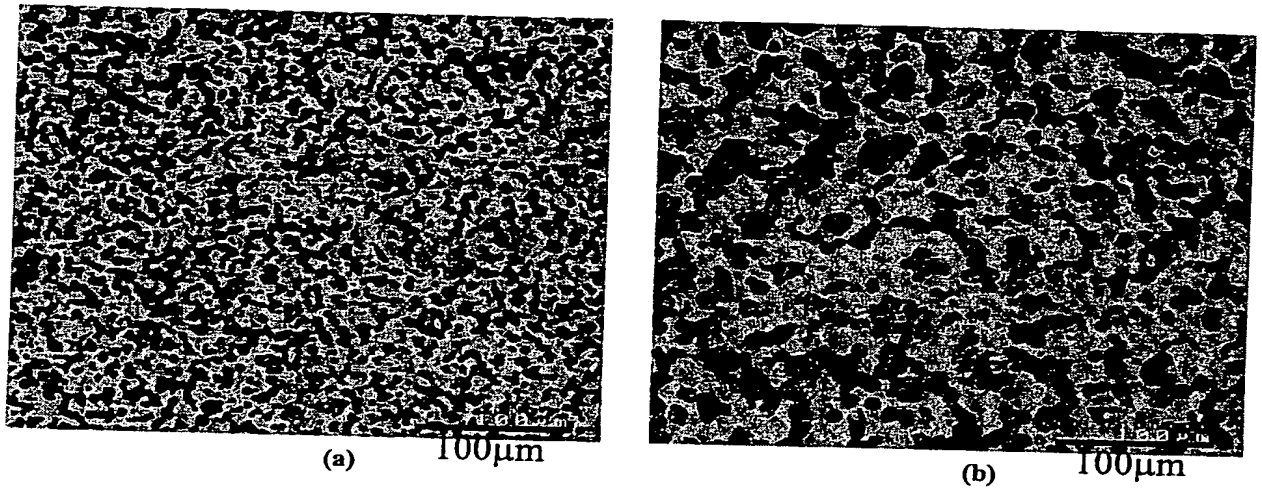
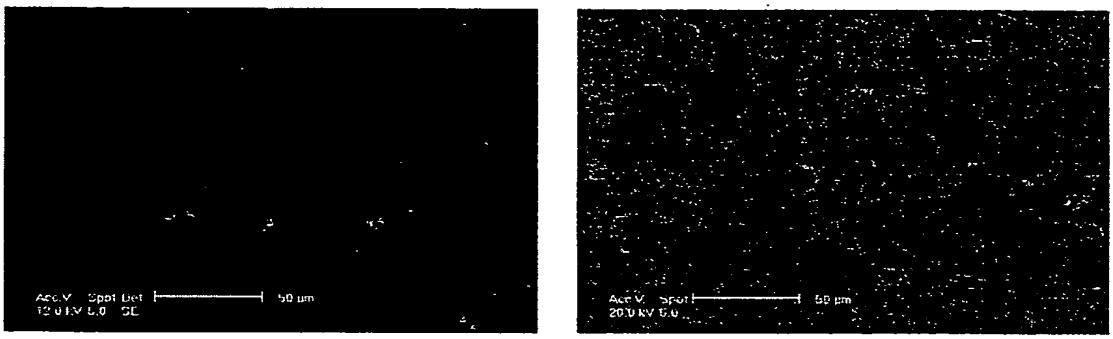


Fig. 2: SEM micrographs of the Ti_3Al/Al_2O_3 composite produced by pressureless sintering of the Al/TiO_2 composite powder at (a) 1550°C and (b)1650°C for 1 hour respectively.

FIGURE 2



(a) (b)

Fig. : SEM backscattered electron micrographs of Ti_3Al-10vol.%SiC samples produced by HIPping at 1000°C for 2 hours under 200 MPa: (a) 2 h milled and (b) 8 h milled.

FIGURE 3

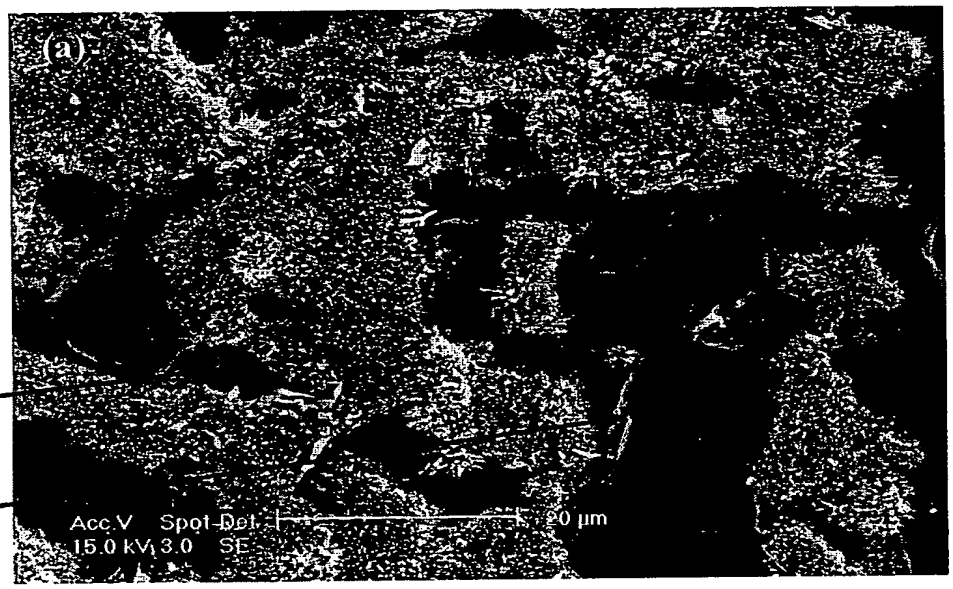


Fig. Surface and cross-section morphologies of Ti(Al,O)/Al_2O_3 composite after oxidation at 700°C isothermally for 100 hours: (a) surface morphology; (b) and (c) cross-section morphology.

FIGURE 4A

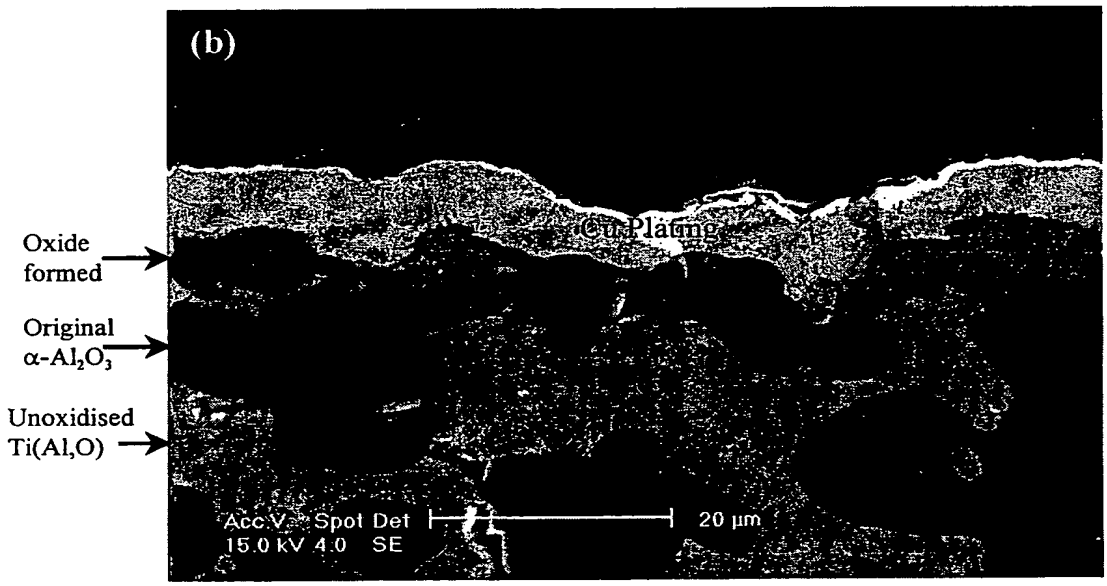


FIGURE 4B

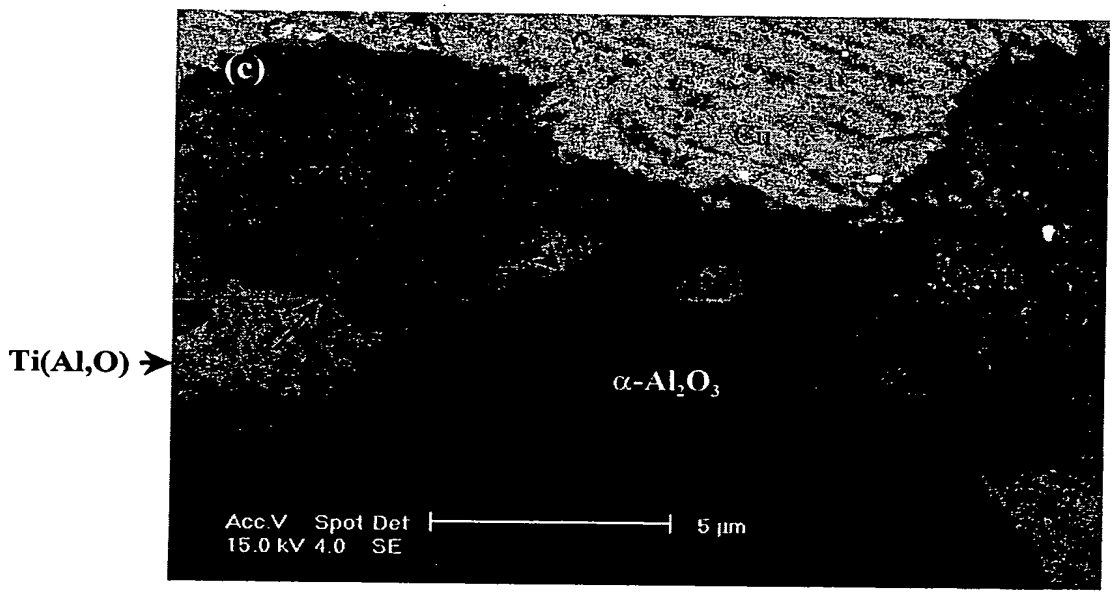


FIGURE 4C

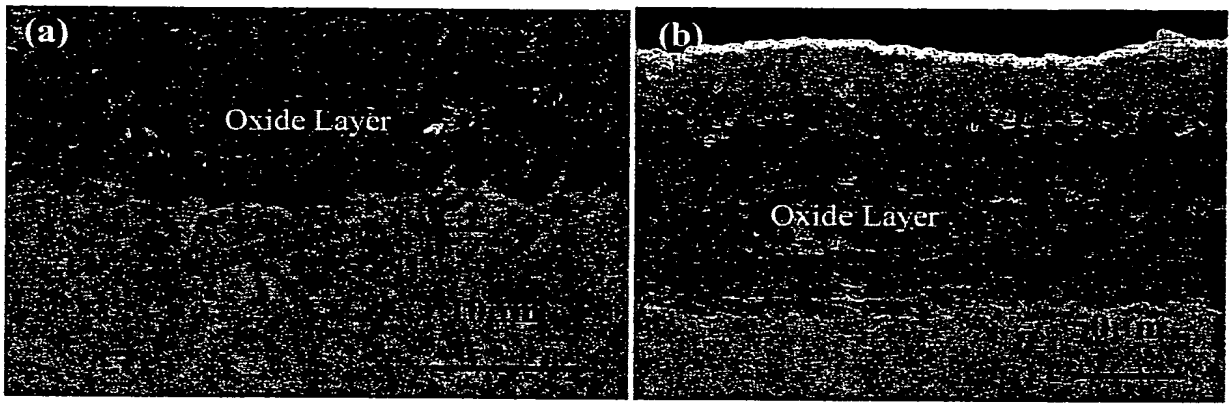


Fig. : Cross-section of Ti_3Al/20%TiC composite samples oxidised at 800°C in air for 200 hrs; (a) produced using 8hrs milled powder, and (b) produced using 16hrs milled powder.

FIGURE 5

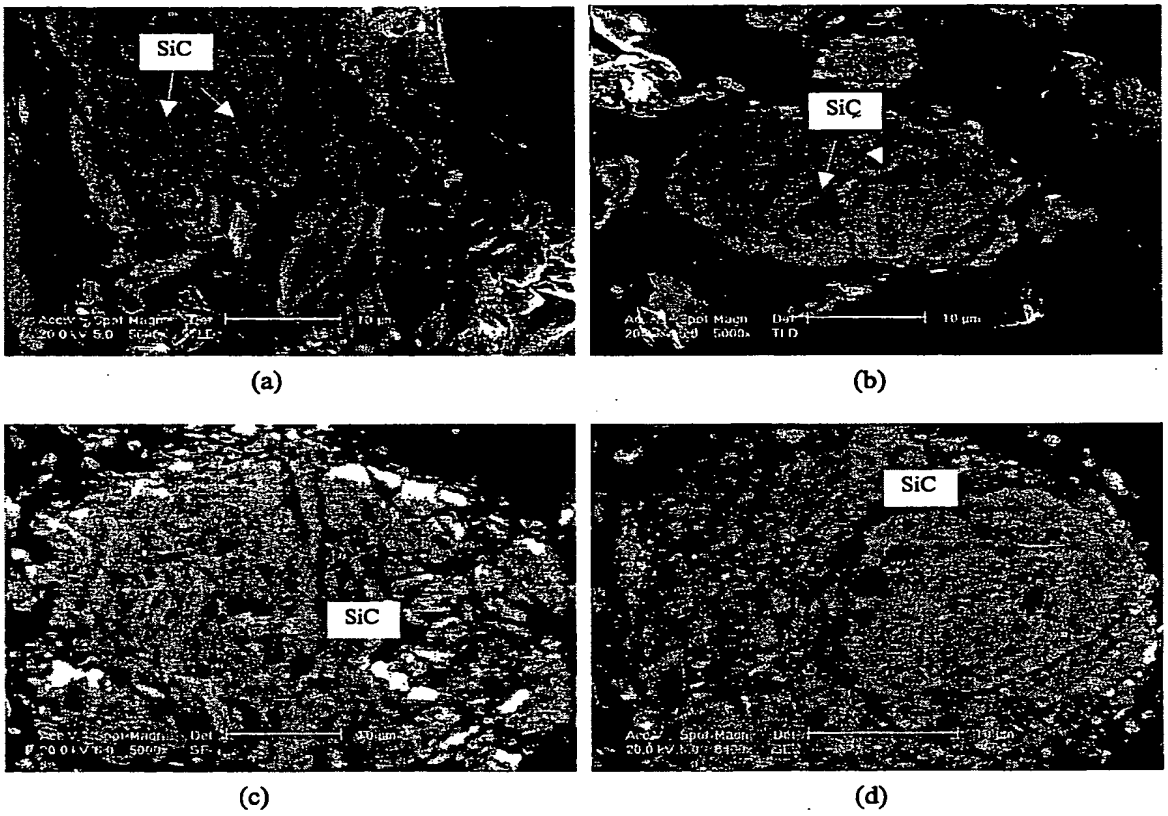


Fig : SEM micrographs of the Ti_3Al-10vol% SiC powder particles after different milling durations. (a) 2 hours; (b) 4 hours; (c) 8 hours; and (d) 16 hours.

FIGURE 6